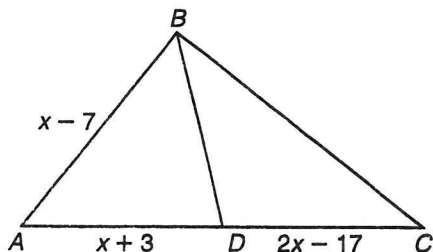
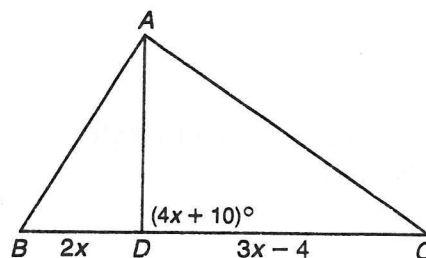
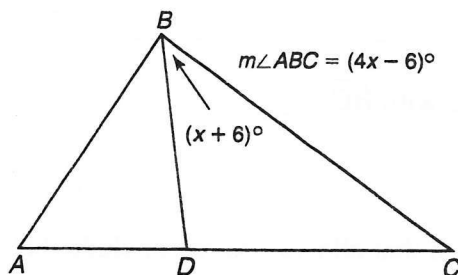


Practice

Student Edition
Pages 238-244**Special Segments in Triangles**1. Find AB if \overline{BD} is a median of $\triangle ABC$.2. Find BC if \overline{AD} is an altitude of $\triangle ABC$.3. Find $m\angle ABC$ if \overline{BD} is an angle bisector of $\triangle ABC$.**In Exercises 4-6, $A(2, 5)$, $B(12, -1)$, and $C(-6, 8)$ are the vertices of $\triangle ABC$.**

4. What are the coordinates of K if \overline{CK} is a median of $\triangle ABC$?
5. What is the slope of the perpendicular bisector of \overline{AB} ? What is the slope of \overline{CL} if \overline{CL} is the altitude from point C ?
6. Point N on \overline{BC} has coordinates $\left(\frac{8}{5}, \frac{21}{5}\right)$. Is \overline{NA} an altitude of $\triangle ABC$? Explain your answer.

1. Can 6,7,8 can be sides of a triangle? _____

☺ Try to sketch the triangle.

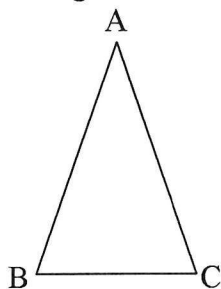
Why (not)? _____

2. Can 3,10,6 can be sides of a triangle? _____

☺ Sketch the triangle.

Why (not)? _____

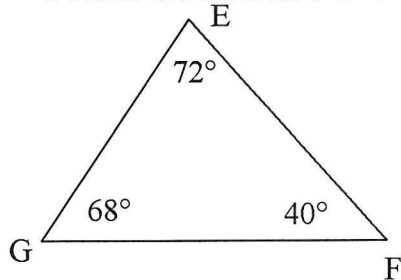
3. Draw a segment that shows the shortest distance from point A to segment \overline{BC}



How do you know it's the shortest distance? _____

What type of angles does it make with \overline{BC} _____

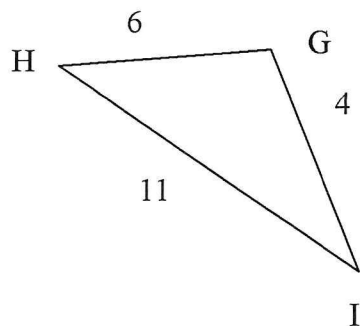
4. Name the shortest and longest sides of $\triangle EFG$ and the theorem that allows you to conclude that.



Shortest? _____ Why? _____

Longest? _____ Why? _____

5. Name the angles with the greatest and least measure in $\triangle GHI$.



Smallest? _____ Why? _____

Largest? _____ Why? _____
